

ABSTRACT

1 A wireless optical communication systems using two
2 optical transceivers located at the opposite ends of an
3 optical communication line. The optical communication
4 system can be either two-element, when each of the said
5 transceivers contains one optical transmitter (emitter)
6 and one optical receiver, or it can be four-element,
7 where each of the said transceivers contains two optical
8 transmitters and two optical receivers. The output of
9 each of the optical transmitters is a diverging beam of
10 incoherent electromagnetic radiation arranged to have a
11 cross sectional diameter which is larger than the cross
12 sectional diameter of the respective optical receiver at
13 that point on the communication line at which the
14 respective optical receiver is situated. The invention
15 reduces the probability of communication failure, higher
16 noise resistance, and lowers operation and production
17 costs.